

Amendments to the Specification

On page 3, please replace the paragraph starting on line 17 with the following:

An embodiment of the invention provides a tissue surface treatment apparatus that includes a housing having a proximal end, a distal including a tissue contacting surface and an interior defined by the housing. A hand piece is coupled to the housing. The tissue contact surface has a plurality of apertures. An energy delivery device including at least one electrode is positionable in the housing interior. The at least one electrode includes a tissue penetrating distal end in substantial alignment with an aperture of the plurality of aperture. The at least one electrode is configured to be advanced from the housing interior through the aperture and into a target tissue site to define an ablation volume at least partly bounded by a tissue surface. An advancement device is coupled to the energy delivery device. The advancement device is at least partly positionable within at least one of the housing or the handpiece. The advancement device is configured to advance the at least one electrode from the housing interior into the target tissue site and completely withdraw the at least one electrode into the housing interior. A cable is coupled to one of the housing or the energy delivery device. The cable is configured to be coupled to an energy source.

On page 56, please replace the paragraph starting on line 5 with the following:

Depending upon the location of the tumor it may be advantageous to operate in a bipolar mode so as not to have the return electrical current flow through a narrowed or small portion of the liver where the tissue impedance can be great enough to cause a temperature increase sufficient to coagulate or damage the hepatic vein or other hepatic vasculature. Accordingly, referring to Figures 50a~~49a~~ and 50b~~49b~~, in an embodiment impedance measurement circuitry and/or controller/logic resources 339/350~~338/350~~ (coupled to power source 20) can be configured to determine if the return path impedance is sufficient to cause heating anywhere along the return path and automatically switch into a bipolar mode either prior to energy delivery or once such impedance or resulting temperature exceeds a preselected threshold. In a related embodiment, thermal, flow and coagulation sensors 22 can be positioned in the hepatic

vasculature within target site 5' or nearby tissue. Sensors 22 can monitor both the temperature of the hepatic vasculature as well as monitor blood flow rates there through the hepatic vasculature. Again sensors 22 are coupled to logic resources which switch from a monopolar to a bipolar mode, shut off or otherwise attenuate the delivery of power to target site 5' when: (i) the tissue temperature exceeds an absolute threshold or a rate of increase; (ii) the blood flow rate falls below an absolute threshold or a rate of decrease; or (iii) a combination of items (i) and (ii). In these and related embodiments, sensors 22 can be positioned on electrode 18 or passive non energy delivering members which can be positioned at varying distances from energy delivery devices 18 so as to be to passively monitor tissue temperatures at selected distances from electrode 18. Sensors 22 can be electronically coupled to logic resource in turn coupled to power source 20. Such resources can include microprocessors containing embedded modules or software programs. Such microprocessors can include an Intel® Pentium® III chip or a PowerPC® chip manufactured by the Motorola Corporation. Such resource can also contain embedded control modules that include process control algorithms known in the art such as PID algorithms. The switching between monopolar to bipolar modes can be achieved by the use of switching circuitry 20s including multiplexer devices (including a densely packed wavelength multiplexor) coupled to one or more electrodes 18 as wells as return electrode 18r and tissue contact surface 14 including conductive portions 14con. Switching to bipolar mode also serves to keep RF induced heating closer to tissue surface 5s thus preventing the unwanted heating of deeper tissue containing healthy tissue and/or thermally sensitive structures. Thus in use, embodiments having the ability to have feedback control to switch between monopolar and bipolar modes present the advantage of more refined and faster control over the depth of tissue heating to prevent thermal injury of underlying healthy/sensitive tissue without having to reposition the electrodes.